



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,040	04/07/2004	Christoph Ender	KOCH.105133	9247

27910 7590 06/24/2005

STINSON MORRISON HECKER LLP
ATTN: PATENT GROUP
1201 WALNUT STREET, SUITE 2800
KANSAS CITY, MO 64106-2150

EXAMINER

BUSHEY, CHARLES S

ART UNIT	PAPER NUMBER
----------	--------------

1724

DATE MAILED: 06/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,040

Applicant(s)

ENDER ET AL.

Examiner

Scott Bushey

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 18, 19, 22-24 and 31-38 is/are rejected.
- 7) ☒ Claim(s) 8-17, 20, 21 and 25-30 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12-6-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-6, and 31-36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Huber (Figs. 3 and 4).
3. Claims 1-6, 18, 19, and 31-36 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lefevre (Fig. 3; col. 4, lines 63-68; col. 5, lines 1-14; col. 7, lines 28-36).

Applicant should note that the openings (54) in the collectors (30) and the downcomers (98), which drain the sumps (90).

4. Claims 1-7, 18, 19, 22, 23, 31, 32, 37, and 38 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Robinson et al (Figs. 1-6; col. 4, lines 22-32, 40-64).

Applicant should note that the chordal sumps (5) and the annular sump (4) are all at the same horizontal level and are all in complete fluid communication with one another since the reference does not suggest any means for impeding flow between the sumps. Further, downcomers (6,7) provide means for draining liquid from the sumps. With respect to the liquid collection channels, Fig. 4 for example, illustrates collection

Art Unit: 1724

channel (16) with openings (15a), which allow for liquid flow from the collection channel to the underlying sump.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al taken together with Tokerud et al.

Robinson et al (Figs. 1-6; col. 4, lines 22-32, 40-64) as applied above substantially disclose applicant's invention as recited by instant claim 24, except for the chordal sumps being arranged so as to intersect one another.

Tokerud et al (Fig. 4) disclose a liquid collection apparatus similar to that of Robinson et al, wherein sumps (54,56) are arranged so as to intersect one another and

Art Unit: 1724

be in fluid communication with one another. It would have been obvious for an artisan at the time of the invention, to modify the orientation of at least one of the chordal sumps of Robinson et al, so as to intersect at least one other chordal sump thereof, in view of Tokerud et al, since such would provide for more uniform mixing of the collected liquid by providing cross-flow communication between adjacent sumps.

Allowable Subject Matter

8. Claims 8-17, 20, 21, and 25-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or suggests means for restricting or impeding flow between intersecting sumps that would otherwise be in full fluid communication with one another, as recited by instant claims 8 and 25.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Bushey whose telephone number is 571 272-1153. The examiner can normally be reached on M-Th 6:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott Bushey
Primary Examiner
Art Unit 1724

csb
6-22-05



6-22-05